UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/587,734	05/17/2007	Andrew Ian Cooper	T3111(C)	2517
	7590 01/14/201 ATENT GROUP	EXAMINER		
800 SYLVAN AVENUE			KRYLOVA, IRINA	
AG West S. Wing ENGLEWOOD CLIFFS, NJ 07632-3100			ART UNIT	PAPER NUMBER
	,		1796	
			NOTIFICATION DATE	DELIVERY MODE
			01/14/2010	ELECTRONIC

# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentgroupus@unilever.com

	Application No.	Applicant(s)					
	10/587,734	COOPER ET AL.					
Office Action Summary	Examiner	Art Unit					
	Irina Krylova	1796					
The MAILING DATE of this communication app	pears on the cover sheet with the c	orrespondence address					
Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).					
Status							
1)⊠ Responsive to communication(s) filed on <u>18 D</u>	ecember 2009.						
3) Since this application is in condition for allowar							
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-21</u> is/are pending in the application.							
4a) Of the above claim(s) <u>10-19</u> is/are withdrawn from consideration.							
5) Claim(s) is/are allowed.							
6)⊠ Claim(s) <u>1-9,20 and 21</u> is/are rejected.							
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.						
8) Claim(s) <u>1-21</u> are subject to restriction and/or election requirement.							
Application Papers							
9)☐ The specification is objected to by the Examine	ır.						
10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. § 119							
12)⊠ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).							
a)⊠ All b)□ Some * c)□ None of:							
1. Certified copies of the priority documents have been received.							
2. Certified copies of the priority documents have been received in Application No							
3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).							
* See the attached detailed Office action for a list of the certified copies not received.							
222 and diagonal distinct distinct of the defining copies not received.							
Attachment(s)							
1) X Notice of References Cited (PTO-892)	4) Interview Summary	(PTO-413)					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate					
3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 12/18/09; 09/27/06; 11/10/09.	5)  Notice of Informal P 6)  Other:	atent Application					

Art Unit: 1796

#### **DETAILED ACTION**

### Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-9, 20-21 in the reply filed on December 18, 2009 is acknowledged. The traversal is on the ground(s) that the common technical feature is water dispersible or water soluble porous bodies having an intrusion volume as measured by mercury porosimetry of at least 3 ml/g and such feature is not discloses in JP 01011141. This is not found persuasive because JP 01011141 discloses porous article produced from a mixture of 0.05-50% of a hydrophilic polymer (such as cellulose or polyvinyl alcohol) and 0.5-50% of a surfactant, by freeze drying the mixture, wherein the product has a thickness of 5-100mm (Abstract). Since the porous article comprises water-soluble polymers, such as cellulose or polyvinyl alcohol, therefore, it would have been obvious to a one of ordinary skill in the art that the porous article disclosed in JP 01011141 is water soluble as well. Though JP 01011141 is silent about intrusion volume as measured by mercury porosimetry being at least 3 ml/g, nevertheless, since the water soluble porous article disclosed in JP 01011141 is identical to the porous bodies claimed in the instant invention, and is produced by the same freeze drying method, as disclosed and claimed in the instant invention, therefore, the water-soluble porous bodies of JP 01011141 would intrinsically comprise an intrinsic volume as measured by mercury porosimetry being within the same range as that claimed in the instant invention.

The requirement is still deemed proper and is therefore made FINAL.

Art Unit: 1796

2. Claims 10-19 are withdrawn from further consideration pursuant to 37 CFR

1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on December 18, 2009.

# **Double Patenting**

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. <u>Claims 1-9, 20-21 are provisionally rejected on the ground of nonstatutory</u> obviousness-type double patenting as being unpatentable over claims 1, 4-8, 10, 21 of a copending application 10/587,732 (published US 2008/0221231). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the following reasons.

Application/Control Number: 10/587,734

Art Unit: 1796

4. The copending application 10/587,732 ('732) claims water-soluble porous bodies comprising a three dimensional oil and water emulsion templated open-cell lattice containing less than 10%wt of water-soluble polymeric material and 5-95%wt of a surfactant, and a water-insoluble material incorporated into the lattice, said porous bodies having an intrusion volume as measured by mercury porosimetry of at least 3 ml/g, the porous bodies having particle size of below 0.2 mm or moulded bodies having a particle size about 5 mm, wherein the water-soluble polymer is a natural gum, a polysaccharide, a cellulose derivative or a (co)polymer comprising (co)monomers selected from the group consisting of vinyl alcohol. acrylic acid, methacrylic acid.

Page 4

5. Though the copending application '732 claims the open-cell lattice having less than 10%wt of a water-soluble polymeric material, whereas the instant application claims 10-95%wt of water-soluble polymeric material, nevertheless, it is the examiner's position that the values are close enough that one of ordinary skill in the art would have expected the same properties. Case law holds that a prima facie case of obviousness exists where the claimed ranges and prior art ranges do not overlap but are close enough that one skilled in the art would have expected them to have the same properties. Titanium Metals Corp. of America v. Banner, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985).

Therefore, the porous bodies clamed in the instant invention are an obvious derivative of the porous bodies claimed in the copending application '732.

This is a <u>provisional</u> obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

6. <u>Claims 1-9, 20-21</u> are directed to an invention not patentably distinct from claims 1, 4-8, 10, 21 of a copending application 10/587,732 (published US 2008/0221231). Specifically, see the discussion in paragraphs 3-5 above.

The U.S. Patent and Trademark Office normally will not institute an interference between applications or a patent and an application of common ownership (see MPEP Chapter 2300). The copending application 10/587,732, discussed above, would form the basis for a rejection of the noted claims under 35 U.S.C. 103(a) if the commonly assigned case qualifies as prior art under 35 U.S.C. 102(e), (f) or (g) and the conflicting inventions were not commonly owned at the time the invention in this application was made. In order for the examiner to resolve this issue, the assignee can, under 35 U.S.C. 103(c) and 37 CFR 1.78(c), either show that the conflicting inventions were commonly owned at the time the invention in this application was made, or name the prior inventor of the conflicting subject matter.

A showing that the inventions were commonly owned at the time the invention in this application was made will preclude a rejection under 35 U.S.C. 103(a) based upon

the commonly assigned case as a reference under 35 U.S.C. 102(f) or (g), or 35 U.S.C. 102(e) for applications pending on or after December 10, 2004.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 7. Claims 1, 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujimoto (JP 01011141).
- 8. Fujimoto discloses porous article produced from a mixture of 0.05-50% of a hydrophilic polymer (such as cellulose or polyvinyl alcohol) and 0.5-50% of a surfactant, by freeze drying the mixture, wherein the product has a thickness of 5-100mm (Abstract) and the pores are adjustable by the amount of a surfactant (Abstract). Since the porous article comprises water-soluble polymers, such as cellulose or polyvinyl alcohol, therefore, it would have been obvious to a one of ordinary skill in the art that the porous article disclosed in Fujimoto is water soluble as well. Though Fujimoto is silent about intrusion volume as measured by mercury porosimetry being at least 3 ml/g, nevertheless, since the water soluble porous article disclosed in Fujimoto is identical to the porous bodies claimed in the instant invention, and is produced by the same freeze drying method, as disclosed and claimed in the instant invention, therefore, the water-

soluble porous bodies of **Fujimoto** would intrinsically comprise an intrinsic volume as measured by mercury porosimetry being within the same range as that claimed in the instant invention.

9. Claims 1-3, 5-8, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jeong et al (US 6,451,348).

- **10. Jeong et al** discloses a porous matrix release system comprising:
- 1) a polymer comprising ethylene-vinyl alcohol copolymers (as to instant claim 3, cited in col. 6, lines 35-38);
- 2) 5% wt of a surfactant selected from a group consisting of polyoxyethylene-sorbitan fatty acid esters, sorbitan esters; and alkylaryl sulfonates (as to instant claims 5-6, cited in col. 3, lines 54-65);

wherein the porous matrix system is produced by mixing the polymer with the surfactant followed by lyophilizing and drying the mixture (col. 3, lines 25-39).

The porous matrix release system is in the form of pellets or rods, meaning that they are not spherical beads having an average bead diameter of 0.2-5 mm (as to instant claims 1-2, cited in col. 4, lines 30-33).

11. Though **Jeong et al** does not explicitly state the porous system having an intrusion volume measured by mercury porosimetry of at least about 3 ml/g, however, since the porous system of **Jeong et al** comprises the same composition as that claimed in the

instant invention, and the porous system of **Jeong et al** is produced by the same process as that claimed in the instant invention, therefore, the porous system of **Jeong et al** will intrinsically comprise the intrusion volume measured by mercury porosimetry being the same as that claimed in the instant invention.

- 12. As to instant claims 7-8, the porous matrix further comprises a water-soluble drug, nutritional agents, antiseptic, preservation agents, etc (col. 4, lines 5-19).
- 13. Though **Jeong et al** does not explicitly recite the porous system being water-soluble or water-dispersable, nevertheless, since the porous system of **Jeong et al** comprises the same polymers and surfactants as claimed in the instant invention, therefore, it would would have been obvious to a one of ordinary skill in the art that the porous system of **Jeong et al** will intrinsically be water-soluble or water-dispersable as well. Therefore, the porous system of **Jeong et al** can be dissolve or dispersed in aqueous medium to produce a solution or dispersion.

Futhermore, claims 20 and 21 are product by process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113.

In addition, claims 20 and 21 teach an intented use for the porous bodies of instant claim 1. Case law holds that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art

Application/Control Number: 10/587,734

Art Unit: 1796

structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

Page 9

14. Claims 1-3, 5-8, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gregory et al (US 4,371,516).

- **15. Gregory et al** discloses shaped articles having a porous open matrix network of water-soluble or water-dispersible carrier (col. 2, lines 37-40), the articles carrying a chemical (as to instant claim 7), the article being capable of being rapidly disintegrated by water (col. 1, lines 58-64), wherein the article comprise:
- A) a polysaccharide, polyvinyl alcohol, polyvinyl pyrrolidone or mixtures thereof;
- B) a surfactant, such as polyoxyethylene sorbitan monooleate (col. 4, lines 5-8).

The surfactant prevents the freeze dried product from sticking to the surface of the mold and also aids in the dispersion of the chemical (col. 4, lines 1-7).

- 16. The shaped articles are produced by freeze drying of a composition (col. 3, lines 63-65).
- 17. The shaped articles comprise cylindrical or other shapes (col. 4, lines 8-12).
- 18. Though **Gregory et al** does not explicitly state the porous system having an intrusion volume measured by mercury porosimetry of at least about 3 ml/g, however, since the porous system of **Gregory et al** comprises the same composition as that

Art Unit: 1796

claimed in the instant invention, and the porous system of **Gregory et al** is produced by the same process as that claimed in the instant invention, therefore, the porous system of **Gregory et al** will intrinsically comprise the intrusion volume measured by mercury porosimetry being the same as that claimed in the instant invention.

- 19. Though **Gregory et al** does not specify the amount of surfactant present in the composition, and the provided examples specify the amount of surfactant being less than 5% (see Example 5), nevertheless, since **Gregory et al** stated that the surfactant aids in dispersion of the chemical and prevents the freeze dried product from sticking to mold, therefore, the specific amount of the surfactant present in the composition will become a result effective variable, therefore, it would have been obvious to one skilled in the art at the time of the invention was made, to make variations in the content of the surfactant to obtain the desired degree of dispersing of the chemical in aqueous medium. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) (MPEP 2144.05 II).
- 20. Claims 20 and 21 are product by process claims. For purposes of examination, product-by-process claims are not limited to the manipulation of the recited steps, only the structure implied by the steps. See MPEP 2113.

In addition, claims 20 and 21 teach an intented use for the porous bodies of instant claim 1. Case law holds that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art

Art Unit: 1796

structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963).

**21.** Claims 1-9, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Gregory et al** (US 4,371,516) in view of **Gole et al** (US 5,648,093), **Unger et al** (US 5,502,082) and **Fujimoto** (JP 01011141).

- 22. The discussion with respect to **Gregory et al** (US 4,371,516) set forth in paragraphs 14-20 above, is incorporated here by reference.
- **23. Gregory et al** fails to teach the porous articles comprising cellulose material as a polypropylene, the specific ratio between the polymer and a surfactant and the active agent being a water-insoluble material.
- **24. Gole et al** discloses a fast dissolving solid porous dosage form comprising:
- A) 0.1-15% wt of matrix material (col. 2, lines 54-63) comprising hydroxyethylcellulose and xanthan gum (col. 6, lines 35-67);
- B) a surfactant (col. 6, lines 8-10);
- C) an active agent,

wherein an active agent comprises a water-insoluble pigment (col. 13, lines 30-45).

Art Unit: 1796

25. The specific example discloses spheres produced by freeze drying of an aqueous solution containing 4%wt of a gelatin (as a polymer carrier); 3% mannitol and 1% of sodium diethylsulfosuccinate as a surfactant (col. 15, lines 65-67; col. 1, lines 1-15). Since no other ingredients besides gelatin (as a polymer carrier); mannitol and sodium diethylsulfosuccinate, therefore, it would have been obvious to a one of ordinary skill in the art at the time of the invention was made that the ratio between these components will be: 12.5 parts of surfactant to 87.5 parts of polymer (gelatin and mannitol).

26. The solid carrier system may be added to a medium to obtain a solution or dispersion of the desired concentration (col. 4, lines 17-20).

The resulting preparation exhibits high porosity while having sufficient strength (col. 4, lines 24-27).

- 27. Unger et al discloses highly porous body having an open celled three-dimensional lattice structure produced by freeze drying of a composition comprising hydroxyl containing polymers, such as polysaccharides, vinyl alcohols (col. 5, lines 2-20) and a surfactant as a pore controlling agent (col. 11, lines 42-50) to maximize pore volume.
- **28. Fujimoto** discloses porous article produced from a mixture of 0.05-50% of a hydrophilic polymer (such as cellulose or polyvinyl alcohol) and 0.5-50% of a surfactant, by freeze drying the mixture, wherein the product has a thickness of 5-100mm (Abstract) and the pores are adjustable by the amount of a surfactant (Abstract).

Art Unit: 1796

## 29. Since

- 1) **Gregory et al** discloses shaped articles having a porous open matrix network of water-soluble or water-dispersible carrier, the articles carrying a chemical and being rapidly disintegrated by water comprising a polymer and a surfactant, but fail to teach the porous articles comprising cellulose material as a polypropylene, the specific ratio between the polymer and a surfactant and the active agent being a water-insoluble material;
- 2) Gole et al discloses a fast dissolving solid porous dosage form comprising 0.1-15% wt of matrix material comprising hydroxyethylcellulose, a surfactant and an active agent, wherein an active agent comprises a water-insoluble pigment and wherein the ratio between the surfactant and the polymer being 12.5 parts of surfactant to 87.5 parts of polymer (gelatin and mannitol); the resulting preparation exhibits high porosity while having sufficient strength (col. 4, lines 24-27);
- 3) **Unger et al** discloses highly porous body having an open celled three-dimensional lattice structure, specifically teaching that surfactant is used a pore controlling agent to maximize pore volume (col. 11, lines 42-50);
- 4) **Fujimoto** discloses porous article produced from a mixture of a hydrophilic polymer (such as cellulose or polyvinyl alcohol) and 0.5-50% of a surfactant, by freeze drying the mixture, wherein the pores are adjustable by the amount of a surfactant (Abstract); therefore, it would have been obvious to a one of ordinary skill in the art at the time of the invention was made to use the surfactant in amount as disclosed by **Gole et al** in

the process for producing shaped porous articles of **Gregory et al**, to further increase pore volume of the porous article of **Gregory et al**, according to the teachings of **Unger et al** and **Fujimoto**.

- 30. Claims 1-7, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al (US 5,502,082).
- **31. Unger et al** discloses a highly porous body having an open-celled three-dimensional lattice structure (Abstract), having a pore volume of at least 4 ml/g (col. 4, lines 11-16) comprising:
- A) a water-soluble polymer comprising hydroxyl containing polymers, such as polysaccharides, vinyl alcohols (col. 5, lines 2-20) and
- B) 5%wt (col. 11, lines 65-67) of a surfactant as a pore controlling agent (col. 11, lines 42-50) to maximize pore volume;
- wherein the body is in the form of a powder having a particle diameter of 1-10 microns (as to instant claim 2, col. 2, lines 26-29).
- 32. All ranges of the components of the composition of Unger et al are overlapping with the corresponding ranges of the components claimed in the instant invention. It is well settled that where the prior art describes the components of a claimed compound or compositions in concentrations within or overlapping the claimed concentrations a prima facie case of obviousness is established. See In re Harris, 409 F.3d 1339, 1343,

74 USPQ2d 1951, 1953 (Fed. Cir 2005); In re Peterson, 315 F.3d 1325, 1329, 65 USPQ 2d 1379, 1382 (Fed. Cir. 1997); In re Woodruff, 919 F.2d 1575, 1578 16 USPQ2d 1934, 1936-37 (CCPA 1990); In re Malagari, 499 F.2d 1297, 1303, 182 USPQ 549, 553 (CCPA 1974).

- 33. As to instant claim 6, the surfactant comprises dimethyldioctadecylammonium bromide (col. 11, lines 45-50).
- 34. The porous body is used as active-agent support materials (col. 12, lines 10-12).
- 35. Claims 1-9, 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Unger et al (US 5,502,082) in view of Gole et al (US 5,648,093).
- 36. The discussion with respect to **Unger et al** (US 5,502,082) set forth in paragraphs 30-34 above, is incorporated here by reference.
- **37. Unger et al** fails to specify the active-material being carried by the porous bodies being water-soluble vitamins or water-insoluble dyes.
- 38. Gole et al discloses a fast dissolving solid porous dosage form comprising:
- A) 0.1-15% wt of matrix material (col. 2, lines 54-63) comprising hydroxyethylcellulose and xanthan gum (col. 6, lines 35-67);
- B) a surfactant (col. 6, lines 8-10);

Art Unit: 1796

C) an active agent,

wherein an active agent comprises a water-insoluble pigment (col. 13, lines 30-45) or vitamins (col. 6, lines 20-25).

### 39. Since

- 1) Unger et al discloses a highly porous body having an open-celled three-dimensional lattice structure (Abstract), having a pore volume of at least 4 ml/g (col. 4, lines 11-16) comprising a water-soluble polymer comprising hydroxyl containing polymers, such as polysaccharides, vinyl alcohols, and a surfactant as a pore controlling agent to maximize pore volume; wherein the body is in the form of a powder having a particle diameter of 1-10 microns; used as active-agent support materials (col. 12, lines 10-12); but fails to specify the active-material being carried by the porous bodies being water-soluble vitamins or water-insoluble dyes;
- 2) Gole et al discloses a fast dissolving solid porous dosage form, similar to the porous form of Unger et al, but also specifies the active agent being a water-insoluble pigment (col. 13, lines 30-45) or vitamins (col. 6, lines 20-25);

therefore, it would have been obvious to a one of ordinary skill in the art at the time of the invention was made to use of highly porous body of **Unger et al** as a carrier for water-insoluble pigment or vitamins as well.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Irina Krylova whose telephone number is (571)270-7349. The examiner can normally be reached on Monday-Friday 7:30am-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasudevan Jagannathan can be reached on (571)272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Irina Krylova/ Examiner, Art Unit 1796

/Vasu Jagannathan/ Supervisory Patent Examiner, Art Unit 1796